PERIODIC REVIEW

American Avionics
Facility Site ID#: 39659753

7023 Perimeter Road South,
Seattle, Washington

Northwest Region Office

TOXICS CLEANUP PROGRAM

March 2010

1.0 INTRODUCTION

This document is a review by the Washington State Department of Ecology (Ecology) of post-cleanup Site conditions and monitoring data to ensure that human health and the environment are being protected at the American Avionics (Site). Cleanup at this Site was implemented under the Model Toxics Control Act (MTCA) regulations, Chapter 173-340 Washington Administrative Code (WAC).

Cleanup activities at this Site were completed under the Voluntary Cleanup Program (VCP). The cleanup actions resulted in concentrations of petroleum hydrocarbons remaining at the Site which exceed MTCA cleanup levels. The MTCA cleanup levels for soil are established under WAC 173-340-740. The MTCA cleanup levels for groundwater are established under WAC 173-340-720. WAC 173-340-420 (2) requires that Ecology conduct a periodic review of a Site every five years under the following conditions:

(a) Whenever the department conducts a cleanup action
(b) Whenever the department approves a cleanup action under an order, agreed order or consent decree
(c) Or, as resources permit, whenever the department issues a no further action opinion;
(d) and one of the following conditions exists:
    1. Institutional controls or financial assurance are required as part of the cleanup
    2. Where the cleanup level is based on a practical quantitation limit
    3. Where, in the department's judgment, modifications to the default equations or assumptions using Site-specific information would significantly increase the concentration of hazardous substances remaining at the Site after cleanup or the uncertainty in the ecological evaluation or the reliability of the cleanup action is such that additional review is necessary to assure long-term protection of human health and the environment.

When evaluating whether human health and the environment are being protected, the factors the department shall consider include [WAC 173-340-420(4)]:

(a) The effectiveness of ongoing or completed cleanup actions, including the effectiveness of engineered controls and institutional controls in limiting exposure to hazardous substances remaining at the Site;
(b) New scientific information for individual hazardous substances of mixtures present at the Site;
(c) New applicable state and federal laws for hazardous substances present at the Site;
(d) Current and projected Site use;
(e) Availability and practicability of higher preference technologies; and
(f) The availability of improved analytical techniques to evaluate compliance with cleanup levels.

The Department shall publish a notice of all periodic reviews in the Site Register and provide an opportunity for public comment.

2.0 SUMMARY OF SITE CONDITIONS

2.1 Site Description and History

The property is located on the east side of Boeing Field and is owned by King County International Airport (KCIA). The property is currently leased by American Avionics. The site is relatively flat and is slightly larger than 1 acre in area. The property historically included an airplane hangar and was asphalt paved. The property was used for approximately 15 years for the storage of light aircraft without a hangar.

GeoEngineers completed a geotechnical engineering study in 1992 for design of a new office building with an attached aircraft hangar. The geotechnical engineering report was completed for American Avionics, and further investigation work was not completed prior to construction of the new office and hangar. During the study, a hydrocarbon odor was noted in soil boring B-2 located near the south property boundary (GeoEngineers, 1992). During demolition and removal of the asphalt pavement in November 1996, stained soils were observed at the northwest and southwest corners and in the center of the proposed building footprint.

American Avionics constructed a two-story office structure with an attached aircraft hangar that occupies almost the entire property, completed in late 1999.

2.2 Site Investigations and Sample Results

Limited sampling of the stained areas was conducted by GeoEngineers on behalf of American Avionics. Samples were analyzed for total petroleum hydrocarbons (TPH) as gasoline, diesel, and oil range petroleum hydrocarbons (TPH-G, TPH-D, and TPH-O), and two samples reported concentrations exceeding MTCA Method A cleanup levels. Benzene, ethylbenzene, toluene, and xylenes (BTEX) were not detected in any of the samples.

Additional soil sampling was conducted in December 1996. Soil borings were advanced at 19 locations and a total of 20 samples were analyzed for TPH and BTEX. Halogenated volatile organic compounds (HVOCs) and metals were also analyzed in selected samples. BTEX and HVOCs were not detected in any of the samples analyzed. Metals were either non-detect or the concentrations were below the MTCA Method A or B cleanup levels. TPH was detected in 4 of 20 samples, and 2 samples exceeded MTCA Method A cleanup levels for TPH-G or TPH-O. A detailed summary of the above investigations is presented in GeoEngineers report titled "Report of Environmental Assessment and Monitoring Services, Boeing Field Corporate Center II, Seattle, Washington" (September 17, 1997), which was submitted to Ecology in September 1999.

A groundwater investigation was conducted at the American Avionics site after remediation/building construction was completed to evaluate groundwater conditions. Boring locations were selected to investigate areas where elevated concentrations of TPH were

encountered, and areas downgradient of impacted soils. Investigation at a nearby former electronics manufacturing facility indicated shallow groundwater flows to the west at a depth of approximately 7 feet below ground surface (bgs). Five soil borings were advanced on the north, west, and south sides of the hangar on October 15, 1999 using direct-push drilling equipment. Each of the borings was advanced to a depth of 10 feet bgs. Soil samples were collected continuously from the ground surface to the bottom of each boring. Samples were labeled by boring number and upper depth of sample interval (e.g., SB-1-7.5 was collected from boring SB-1, with the top of the sample interval at 7.5 feet bgs). Groundwater was encountered in all of the borings at depths of approximately 8 feet bgs. Groundwater samples were collected through a 2-foot long temporary well screen placed in the bottom (8 to 10 feet bgs) of each boring. Following placement of the screen, a peristaltic pump and clean tubing was used to purge three volumes of water from each temporary well, after which a sample was collected. At the completion of sampling, each boring was abandoned by backfilling with hydrated bentonite chips, and an asphalt patch placed at the surface. Laboratory testing was conducted by OnSite Environmental, Inc., (OSE) of Redmond, Washington. One soil sample was selected from each boring, and each of the groundwater samples was analyzed for TPH as gasoline (TPH-G) using method WTPH-G and TPH as diesel and motor oil (TPH-D and TPH-O) using method WTPH-D extended. BTEX was not analyzed because the previous soil sampling did not reveal them to be compounds of concern at the site.

All of the soil and groundwater samples were non-detect for all of the petroleum hydrocarbon fractions analyzed.

Soil removed from the American Avionics site during construction was stockpiled at a controlled area near the north end of KCIA. Soil samples were collected by excavating through the stockpile and screening for indicators of contamination. The excavation sidewalls were tested with a photoionization detector (PID) for elevated concentrations of organic vapors, and this information was combined with visual and olfactory indicators to select the 1-foot sample interval for analysis. Results for TPH-G, and BTEX were all non-detect. TPH-D was reported in one sample at a concentration of 46 milligrams per kilogram (mg/kg). TPH-O was detected in four samples at concentrations ranging from 110 to 980mg/kg.

The initial soil evaluation included collection and analysis of eight samples on November 11, 1999. Samples were collected from within the grid locations labeled with the sample number. Samples were analyzed for TPH-G, TPH-D, TPH-O, and BTEX. In addition, one stockpile sample that exhibited the highest concentration of combined TPH was analyzed for volatile petroleum hydrocarbons/extractable petroleum hydrocarbons (VPH/EPH). The VPH/EPH data were used to evaluate the potential risks posed by residual petroleum hydrocarbons, consistent with Ecology's Interim Interpretive and Policy Statement (publication ECY97-600).

The results for the VPH/EPH analysis reported an equivalent TPH concentration (63 mg/kg) for sample STOCK-l-6 that was much lower than the TPH-D (980 mg/kg) and TPH-O (46 mg/kg) concentration reported from the WTPH-Dx analysis. Re- sampling of the soil stockpile was conducted in May and June 2000 to resolve the discrepancy between reported TPH concentrations for the two methods. The purpose of the re-sampling was to collect an additional

sample that showed a relatively high TPH concentration for the TPH-Dx analysis, and then conduct a second VPH/EPH analysis for evaluation.

Soil that was judged to be clean during excavation was segregated to a covered stockpile. Soil samples were collected from the covered stockpile and analyzed for disposal purposes. The results indicate that field screening was generally successful in segregating TPH impacted soil. However, 4 of the 10 stockpile samples contained TPH at concentrations slightly above Method A levels. The stockpile soil (approximately 1,300 cubic yards) was transported to another location at KCIA. The stockpile was lined and the soil was occasionally tilled to promote degradation of the TPH.

2.3 Cleanup Actions

The results of the assessments were evaluated with respect to the construction schedule. Based on the assessment and the need to permit construction to proceed with minimal delays, the following actions were implemented from November 1996 through May 1997:

- TPH-impacted Soil Treatment/Stabilization - To facilitate site construction activities, the objective of soil remedial action at the site was to minimize the volume of soil removed for off-site disposal, to minimize the migration potential by stabilizing the impacted soil using cement, and to re-use the stabilized soil for foundation and concrete slab subgrade preparation. Soil excavated for the foundation footings and utilities was field screened for the presence of TPH. The field screening included the description of any oil sheen that developed when the soil was placed in water, noticeable petroleum odors, and headspace vapor tests. Soil suspected of containing TPH was treated/stabilized with cement (approximately 8 to 12 percent by weight), which also comprised a component of foundation subgrade preparation prior to construction. The treated soil was placed either beneath the footing alignment or adjacent to the footings that were subsequently covered by asphalt pavement. In addition, the upper 1 foot of soil beneath the building concrete slab floor was treated/stabilized by mixing with cement. Excess soil from the excavation that was not suspected to be contaminated was placed in a lined and covered stockpile. Soil in an area 12 feet by 15 feet surrounding boring location SP-12 was excavated to a depth of approximately 7.5 feet. The soil sample collected at 6 feet bgs contained elevated concentrations of TPH-G. The top 2.5 feet of excavated soil was placed in the stockpile of clean soil, and the remaining soil was treated with cement. The bottom 2 to 3 feet of the excavation was backfilled with clean aggregate, and then the treated soil was backfilled. This area is beneath the concrete floor slab and the building roof.
- Installation of Passive Ventilation System - A passive ventilation system was installed beneath the office portion of the building as a precautionary measure. The initial soil sampling results indicated elevated concentrations of TPH-G in a small portion under the office building; therefore, American Avionics opted to install a passive below-slab vapor ventilation system. The ventilation system includes a layer of gravel with a series of perforated pipes that convert to a main vent that discharges to the atmosphere.
- Soil Sampling During Construction - Representative soil samples were collected from the bottom of the footing and utility trench excavations and analyzed for petroleum

hydrocarbons and BTEX to evaluate residual concentrations of TPH in soil beneath the site. Selected samples were also analyzed for HVOCS and metals. Copies of the laboratory reports are included in GeoEngineers' "Report of Environmental Assessment and Monitoring Services" (GeoEngineers, 1997). The laboratory results indicate that TPH concentrations were generally below MTCA Method A cleanup levels. There were several areas where TPH concentrations exceeded the MTCA Method A levels, including the south-central property boundary, northeast corner of the hangar, central portion of the wall between the hangar and offices, and the central portion of the west wall. Gasoline, diesel, and/or heavy oil range hydrocarbons were detected at concentrations exceeding MTCA Method A cleanup levels in the following samples: FE-19-4.5, FE-24-6.2, U-l-2.0, U-2-2.0, U-9-2.0, U-14-2.0, U-15-2.0, WL-4-4.5, WL-5-4.0, and WL-9-4.0. Most samples were obtained at depths ranging from approximately 2.0 feet bgs to 6.2 feet bgs. Two additional samples, FE-23-4.5 and FE-28-7.5, were obtained from the vicinity of FE-24-6.2 at depths of approximately 4.5 feet and 7.5 feet bgs. Petroleum hydrocarbons either were not detected or were detected at concentrations less than MTCA Method A cleanup levels in these two samples. The areas where TPH concentrations exceeded Method A cleanup levels are covered by the existing concrete floor slab and structures.

Samples with residual petroleum hydrocarbons remaining after construction had concentrations of TPH-G ranging from 6 to 4,810 milligrams per kilogram (mg/kg), concentrations of TPH-D from 10.5 to 4880 mg/kg, and concentrations of TPH-O ranging from 25 to 485 mg/kg. The residual petroleum hydrocarbons were primarily reported at depths of 2 to 4.5 feet bgs, with one sample from the surface and two samples from approximately 6 feet bgs. The reported results did not generally match the analytical standards for TPH-G and TPH-D (i.e., the TPH-G and TPH-D chromatograms did not show typical components that would be found in the standard), indicating that the petroleum hydrocarbons were a different fuel type. This could have been highly weathered jet fuel. Two HVOCs (tetrachloroethene and 1, 2-dichlorobenzene) were detected at very low concentrations (0.106 and 0.0705 mg/kg, respectively) in samples FE-12-4.5 and WL-4-4.5. HVOCs, including chlorinated solvents, were not detected at concentrations above MTCA Method A or B cleanup levels. Priority pollutant metals also were not detected at concentrations of regulatory concern in soil samples obtained during this project.

The results of the soil sampling conducted during construction indicate that there are several areas where there are concentrations of TPH that exceeded MTCA Method A cleanup levels. These areas are located primarily beneath the hangar and office structure, with small portions located beneath the runway tarmac and pavement. In addition, other TPH-impacted soil left on site was stabilized with portland cement, significantly decreasing the mobility of the residual TPH. The combination of capping and stabilizing impacted soils indicates that the residual TPH in soil at the site does not pose a threat to human health or the environment.

The results of the post-construction groundwater investigation indicates that groundwater at the site has not been impacted by the TPH in soil. The soil stabilization and effective capping of the soil by the hangar and office structure (including the adjacent pavement) minimizes the potential for any residual TPH to migrate to groundwater in the future.

The results of the risk evaluation using the highest detected residual petroleum hydrocarbon concentrations in the stockpile soils indicate the soils do not pose a risk to human health by direct contact or a potential risk to groundwater via leaching. It was intended that the soil stockpiles will be left in place and that a vegetative cover be established on the stockpile surface to minimize the potential for erosion. It was believed that this use of the soil was an acceptable end use and protective of human health and the environment.

2.4 Cleanup Levels

The Ecology Interim Policy TPH Method allows for evaluation of cleanup levels using the MTCA Method B and C approach. The Interim Policy has since been replaced with a finalized version via a regulatory change. The Interim Policy divides petroleum hydrocarbons into 13 fractions based on the number and structure of carbon atoms in the hydrocarbon molecules. Molecules with 5 to 12 carbon atoms (EC5 to EC12) are typically found in gasoline, molecules with 8 to 18 carbon atoms (EC8 to EC18) are typically found in diesel fuel, and molecules with 14 to 30 carbon atoms (EC14 to EC3O) are typically found in fuel oil or lube oil. The Interim Policy establishes 6 aliphatic (chain structure) and 7 aromatic (ring structure) fractions. A surrogate chemical is chosen to represent the chemical, physical, and toxicological properties of each fraction. The Interim Policy approach does not yield a soil cleanup level, unlike the methodology used under MTCA. Instead, the Interim Policy method evaluates the risk (hazard index) associated with direct contact with a soil containing a specific petroleum hydrocarbon concentration. If the calculated hazard index is less than or equal to 1.0, then the risk posed by direct contact with the petroleum hydrocarbons is considered acceptable. In addition, the Interim Policy evaluates the soil to groundwater pathway and compares the results of a simple soil/pore water partitioning model to water quality criteria. This offers an alternative to MTCA's default dilution attenuation factor of 1.0 for evaluating the soil to groundwater pathway.

For the stockpile soils at KCIA from the American Avionics site, one sample (STOCK-1-6) was analyzed for VPH/EPH and evaluated using the Interim Policy approach. The non-carcinogenic hazard quotient (HQ) for direct contact with soil was calculated for the hydrocarbon fractions using MTCA Method B residential, and Method C for commercial and industrial exposure assumptions (WAC 173-340). The sum of the HQs across all hydrocarbon fractions is the hazard index, which was compared with MTCA's hazard index action level of 1.0. The Interim Policy requires the separate evaluation of the human health risk posed by direct soil contact with carcinogenic substances (e.g., benzene). Benzene was non-detect in the sample, therefore the residential, commercial, and industrial risk from benzene and carcinogenic substances was not calculated. The calculated hazard index of the soil stockpile sample was 0.02 for direct contact with soil under residential exposure assumptions. The calculated value was less than the hazard index action level of 1.0, indicating that the maximum concentration of petroleum hydrocarbons detected in soil at the stockpile does not pose a human health risk via direct contact. Both the commercial and industrial exposure assumptions produce a hazard index less than the residential exposure assumptions.

The risk to groundwater beneath the site was evaluated according to the Interim Policy's soil/water partitioning and groundwater mixing model. The model assigns solubility values for

each of the hydrocarbon ranges of a representative sample of soil containing residual petroleum hydrocarbons. Hydrocarbon concentrations in soil pore water were calculated based on the percentages of each petroleum hydrocarbon fraction in the soil. The estimated hydrocarbon concentrations in groundwater were calculated based on the mixing of petroleum hydrocarbon impacted pore water with groundwater using the default dilution factor in the Interim Policy. The total hydrocarbon concentration (sum of all hydrocarbon fractions) predicted in groundwater by the soil/water partitioning model was then compared to the MTCA Method A groundwater cleanup level for TPH (1 milligram per liter [mg/L]). Calculations for the risk to groundwater used the highest petroleum hydrocarbon concentrations of the soil stockpile samples. A conservative dilution factor of 1 was assumed for the calculations. The TPH concentrations in groundwater, assumed to be the result of leaching from soil at a location with maximum residual petroleum hydrocarbons, were calculated for the stockpile sample. The resulting calculated groundwater concentration was 0.0012 mg/L. The calculated concentration was less than the MTCA Method A groundwater cleanup level (1.0 mg/L). The calculated groundwater concentration indicates that the remaining petroleum hydrocarbons in the stockpile soils do not pose a potential risk to groundwater via the soil-to-groundwater leaching pathway.

2.5 Restrictive Covenant

Based on the Site use, surface cover and calculated cleanup levels, it was determined that the Site was eligible for a 'No Further Action' determination if a Restrictive Covenant was recorded for the property. A Restrictive Covenant was recorded for the Site in 2001 which imposed the following limitations:

Section 1. A portion of the Property contains petroleum hydrocarbon contaminated soil located beneath the interior portion of the building. The Owner shall not alter, modify, or remove the existing structure in any manner that may result in the release or exposure to the environment of that contaminated soil or create a new exposure pathway without prior written approval from Ecology. Any activity on the Property that may result in the release or exposure to the environment of the contaminated soil that was contained as part of the Remedial Action, or create a new exposure pathway, is prohibited. Some examples of activities that are prohibited include drilling, digging, placement of any objects, or use of any equipment which deforms or stresses the surface beyond its load bearing capability, piercing the surface with a rod, spike or similar item, bulldozing, or earthwork.
Section 2. Any activity on the Property that may interfere with the integrity of the Remedial Action and continued protection of human health and the environment is prohibited.
Section 3. Any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Remedial Action, or create a new exposure pathway, is prohibited without prior written approval from Ecology.
Section 4. The Owner of the property must give thirty (30) day advance written notice to Ecology of the Owner's intent to convey any interest in the Property. No conveyance of title, easement, lease, or other interest in the Property shall be consummated by the Owner without adequate and complete provision for continued monitoring, operation, and maintenance of the Remedial Action.

Section 5. The Owner must restrict leases to uses and activities consistent with the Restrictive Covenant and notify all lessees of the restrictions on the use of the Property.
Section 6. The Owner must notify and obtain approval from Ecology prior to any use of the Property that is inconsistent with the terms of this Restrictive Covenant. Ecology may approve any inconsistent use only after public notice and comment.
Section 7. The Owner shall allow authorized representatives of Ecology the right to enter the Property at reasonable times for the purpose of evaluating the Remedial Action, to take samples, to inspect remedial actions conducted at the property, and to inspect records that are related to the Remedial Action.
Section 8. The Owner of the Property reserves the right under WAC 173-340-440 to record an instrument that provides that this Restrictive Covenant shall no longer limit use of the Property, or be of any further force or effect. However, such an instrument may be recorded only if Ecology, after public notice and opportunity for comment, concurs.

The Restrictive Covenant is available as Appendix 6.4.

3.0 PERIODIC REVIEW

3.1 Effectiveness of completed cleanup actions

The Restrictive Covenant for the Site was recorded and is in place. This Restrictive Covenant prohibits activities that will result in the release of contaminants at the Site without Ecology's approval, and prohibits any use of the property that is inconsistent with the Covenant. This Restrictive Covenant serves to ensure the long term integrity of the remedy.

Based upon the Site visit conducted on March 17, 2010, the building and pavement cover (remedy) at the Site continue to eliminate exposure to contaminated soils by ingestion and contact. The asphalt appears in satisfactory condition and no repair, maintenance, or contingency actions have been required. The Site is still operating as American Avionics. A photo log is available as Appendix 6.5.

Soils with TPH concentrations higher than MTCA cleanup levels are still present at the Site. However, the remedy prevents human exposure to this contamination by ingestion and direct contact with soils. The Restrictive Covenant for the property will ensure that the contamination remaining is contained and controlled.

3.2 New scientific information for individual hazardous substances for mixtures present at the Site

There is no new scientific information for the contaminants related to the Site.

3.3 New applicable state and federal laws for hazardous substances present at the Site

The cleanup at the Site was governed by Chapter 173-340 WAC. WAC 173-340-702(12) (c) [2001 ed.] provides that,

"A release cleaned up under the cleanup levels determined in (a) or (b) of this subsection shall not be subject to further cleanup action due solely to subsequent amendments to the provision in this chapter on cleanup levels, unless the department determines, on a case-by-case basis, that the previous cleanup action is no longer sufficiently protective of human health and the environment."

Although cleanup levels changed for petroleum hydrocarbon compounds as a result of modifications to MTCA in 2001, contamination remains at the Site above the new MTCA Method A and B cleanup levels. Even so, the cleanup action is still protective of human health and the environment. A table comparing MTCA cleanup levels from 1991 to 2001 is available below.

Analyte	1991 MTCA Method A Soil Cleanup Level (ppm)	2001 MTCA Method A Soil Cleanup Level (ppm)	1991 MTCA Method A Groundwater Cleanup level (ppb)	2001 MTCA Method A Groundwater Cleanup Level (ppb)
Cadmium	2	2	5	5
Lead	250	250	5	15
TPH	NL	NL	1000	NL
TPH-Gas	100	100/30	NL	1000/800
TPH-Diesel	200	2000	NL	500
TPH-Oil	200	2000	NL	500

NL = None listed

3.4 Current and projected Site use

The Site is currently used for commercial and industrial purposes. There have been no changes in current or projected future Site or resource uses.

3.5 Availability and practicability of higher preference technologies

The remedy implemented included containment of hazardous substances, and it continues to be protective of human health and the environment. While higher preference cleanup technologies may be available, they are still not practicable at this Site.

3.6 Availability of improved analytical techniques to evaluate compliance with cleanup levels

The analytical methods used at the time of the remedial action were capable of detection below selected Site cleanup levels. The presence of improved analytical techniques would not affect decisions or recommendations made for the Site.

4.0 CONCLUSIONS

The following conclusions have been made as a result of this periodic review:

- The cleanup actions completed at the Site appear to be protective of human health and the environment.

- Soils cleanup levels have not been met at the standard point of compliance for the Site; however, the cleanup action has been determined to comply with cleanup standards since the long-term integrity of the containment system is ensured, and the requirements for containment technologies are being met.

- The Restrictive Covenant for the property is in place and continues to be effective in protecting public health and the environment from exposure to hazardous substances and protecting the integrity of the cleanup action.

Based on this periodic review, the Department of Ecology has determined that the requirements of the Restrictive Covenant continue to be met. No additional cleanup actions are required by the property owner. It is the property owner's responsibility to continue to inspect the Site to assure that the integrity of the remedy is maintained.

4.1 Next Review

The next review for the Site will be scheduled five years from the date of this periodic review. In the event that additional cleanup actions or institutional controls are required, the next periodic review will be scheduled five years from the completion of those activities.

5.0 REFERENCES

GeoEngineers, Inc. 1992, Report, Geotechnical Engineering Services, Proposed Boeing Field Corporate Center II, King County Airport, March 11, 1992;

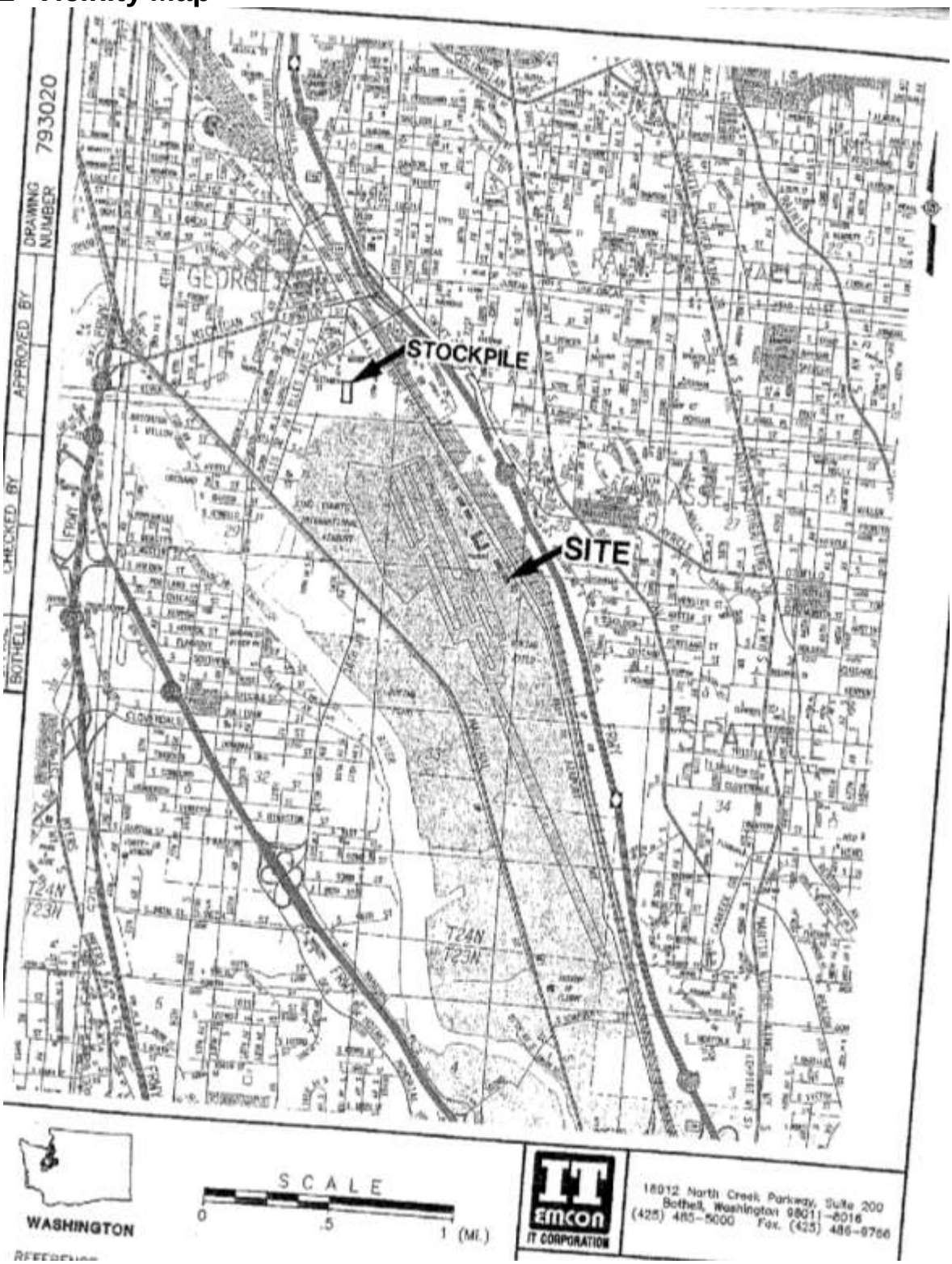
GeoEngineers, Inc. 1997, Report of Environmental Assessment and Monitoring Services, Boeing Field Corporate Center II, Seattle, Washington, September 17, 1997;

2001 Restrictive Covenant.

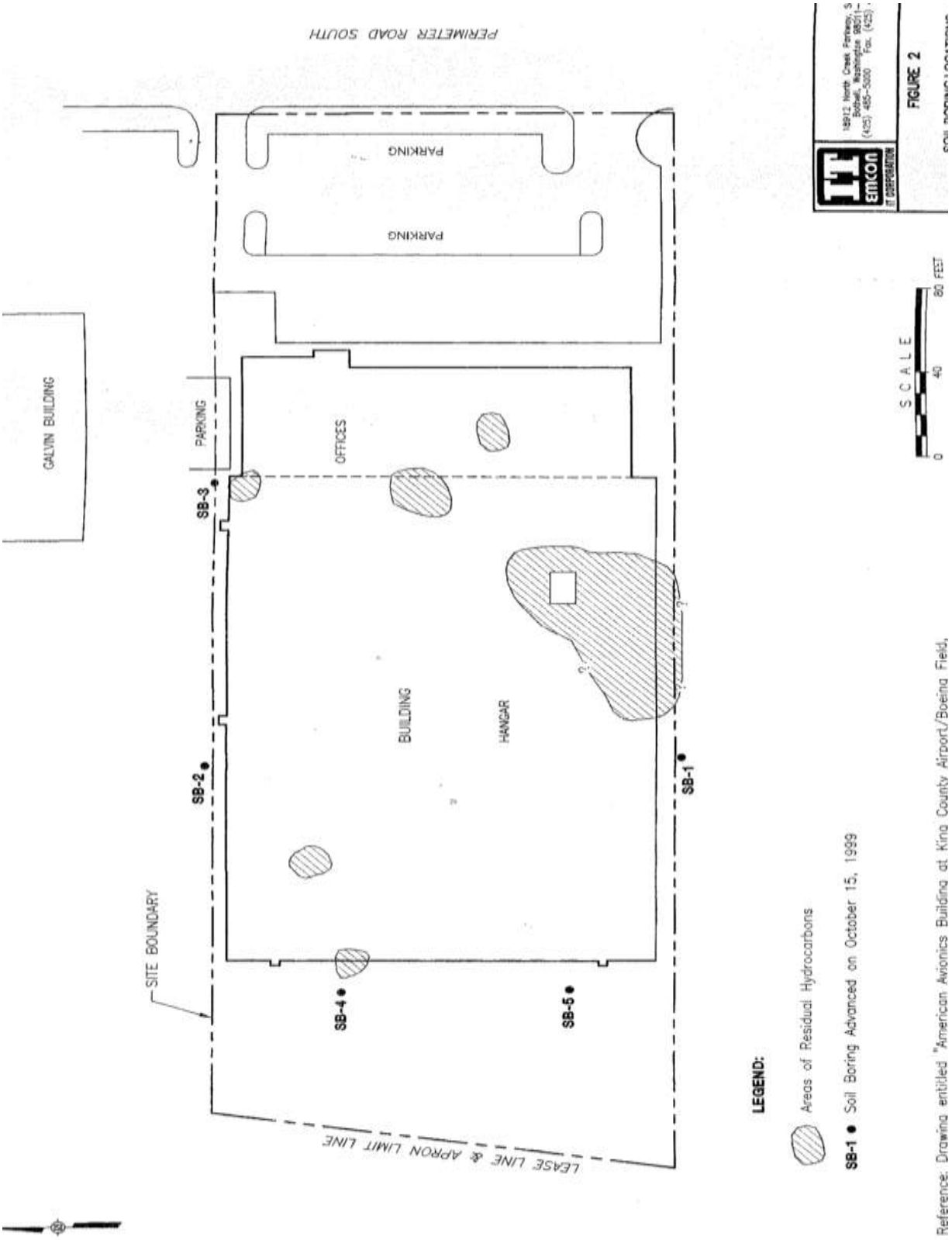
Ecology, 2010, Site Visit.

6.0 APPENDICES

6.1 Vicinity Map



6.2 Site Plan


PERIMETER ROAD SOUTH
PARKING
PARKING
CALVIN BUILDING
PARKING
OFFICES
BUILDING
HANGAR
SB-1
SB-2
SB-3
SB-4
SB-5
SITE BOUNDARY
LEASE LINE & APRON LIMIT LINE
LEGEND:
Areas of Residual Hydrocarbons
SB-1 ● Soil Boring Advanced on October 15, 1999
SCALE
0
40
80 FEET
FIGURE 2
EMCON
Reference: Drawing entitled "American Avionics Building at King County Airport/Boeing Field,

6.3 TPH-Dx Concentration Map

not available

6.4 Environmental Covenant

King County
International Airport
Department of
Construction & Facilities Management
PO Box 80245
Seattle, WA 98108
(206) 296-7380
(206) 296-0100 TDD
(206) 296-0190 FAX

RESTRICTIVE COVENANT

This declaration of Restrictive Covenant is made pursuant to RCW 70 105D 030(1)(f) and (g), and WAC 173-340-440, by King County International Airport, it successors and assigns, and the Washington State Department of Ecology, its successors and assigns

Legal Description American Avionics Lease at the King County International Airport,

A Tract of land in the west half of Section 28, township 24. North, Range 4 East, WM in King county , Washington, Prescribed as follows

Beginning at the southwest quarter (WS ¼) of Section 28, township 24 North, Range 4 East, Willamette Meridian,
Thence North 00 degrees 11' 20 7" West along the east line of said southwest quarter (SW ¼), a distance of 2060 8 feet to the westerly margin of Airport Way,
Thence North 38 degrees 51'23"West along said westerly margin, a distance of 624 39 feet,
Thence South 51 degrees 08 37" west, a distance of 120 feet,
Thence South 51 degrees 08'37" West along the common lease line of Air Associates, Inc and Galvin Flying Service, a distance of 78 5 feet,
Thence South 38 degrees 51'23" East, a distance of 80 89 feet,
Thence South 51 degrees 08'37" West, a distance of 395 02 feet to a point on the Apron Limit Line,
Thence North 29 degrees 52"38" west along the Apron Limit Line,
Thence North 29 degrees 52'38" West along the Apron Limit Line, which is 105 feet from the east taxiway centerline, a distance of 397 04 feet to the TRUE POINT OF BEGINNING,
Thence continuing North 29 degrees 52'38" West, a distance of 176 43 feet,
Thence north 51 degrees 08'37" East along a line which is 50 feet southerly of the southerly exterior of building 7001, a distance of 471 51 feet, more or less, to a point 15 feet westerly of the centerline of Perimeter Rd
Thence south 38 degrees 51'23" East along the westerly right-of-way to Perimeter Road, a distance of 174 27 feet, more or less, to a point which is the northeasterly corner of the Galvin Flying service Parcel B, Thence south 51 degrees 08'37" west along the common lease line with Galvin Flying Service, a distance of 499 05 feet, more or less to the TRUE POINT OF BEGINNING

Tax Parcel I D #

City of Seattle for the King County International Airport - #282404-9007

200110070678

RESTRICTIVE COVENANT

King County International Airport, American Avionics

This Declaration of Restrictive Covenant is made pursuant to RCW 70 105D 030(1)(f) and (g) and WAC 173-340-440 by King County International Airport, its successors and assigns, and the State of Washington Department of Ecology, its successors and assigns (hereafter "Ecology")

An independent remedial action (hereafter "Remedial Action") occurred at the property that is the subject of this Restrictive Covenant The Remedial Action conducted at the property is described in the following documents

Release Report for American Avionics
7031 Perimeter Road South, Boeing Field
Seattle, Washington
EMCON, dated May 5, 1997

Report of Environmental Assessment
and Monitoring Services
Boeing Field Corporate Center II
Seattle, Washington
GeoEngineers, dated Sept 17, 1997

Independent Cleanup Report
American Avionics Property
7031 Perimeter Road South
Seattle, Washington
IT Corporation, dated July 6, 2000

These documents are on file at Ecology's Northwest Regional Office in Bellevue, Washington

This Restrictive Covenant is required because the Remedial Action resulted in residual concentrations of petroleum hydrocarbons which exceed the Model Toxics Control Act Method A Residential Cleanup Level for soil established under WAC 173-340-740

The undersigned, King County International Airport, is the fee owner of real property (hereafter "Property") in the County of King, State of Washington, that is subject to this Restrictive Covenant The Property is legally described as follows

A Tract of land in the west half of Section 28, township 24 North, Range 4 East, WM in King county , Washington, Prescribed as follows

Beginning at the southwest quarter (WS ¼) of Section 28, township 24 North, Range 4 East, Willamette Meridian,
Thence North 00 degrees 11' 20 7" West along the east line of said southwest quarter (SW ¼), a distance of 2060 8 feet to the westerly margin of Airport Way,
Thence North 38 degrees 51'23"West along said westerly margin, a distance of 624 39 feet,
Thence South 51 degrees 08 37" west, a distance of 120 feet,
Thence South 51 degrees 08'37" West along the common lease line of Air Associates, Inc and

Galvin Flying Service, a distance of 78 5 feet,
Thence South 38 degrees 51'23" East, a distance of 80 89 feet,
Thence South 51 degrees 08'37" West, a distance of 395 02 feet to a point on the Apron Limit Line,
Thence North 29 degrees 52"38" west along the Apron Limit Line,
Thence North 29 degrees 52'38" West along the Apron Limit Line, which is 105 feet from the east taxiway centerline, a distance of 397 04 feet to the TRUE POINT OF BEGINNING,
Thence continuing North 29 degrees 52'38" West, a distance of 176 43 feet,
Thence north 51 degrees 08'37" East along a line which is 50 feet southerly of the southerly exterior of building 7001, a distance of 471 51 feet, more or less, to a point 15 feet westerly of the centerline of Perimeter Rd
Thence south 38 degrees 51'23" East along the westerly right-of-way to Perimeter Road, a distance of 174 27 feet, more or less, to a point which is the northeasterly corner of the Galvin Flying service Parcel B, Thence south 51 degrees 08'37"west along the common lease line with Galvin Flying Service, a distance of 499 05 feet, more or less to the TRUE POINT OF BEGINNING

King County International Airport makes the following declaration as to limitations, restrictions, and uses to which the Property may be put and specifies that such declarations shall constitute covenants to run with the land, as provided by law and shall be binding on all parties and all persons claiming under them, including all current and future owners of any portion of or interest in the Property (hereafter "Owner")

Section 1 A portion of the Property contains petroleum hydrocarbon contaminated soil located beneath the interior portion of the building The Owner shall not alter, modify, or remove the existing structure in any manner that may result in the release or exposure to the environment of that contaminated soil or create a new exposure pathway without prior written approval from Ecology

Any activity on the Property that may result in the release or exposure to the environment of the contaminated soil that was contained as part of the Remedial Action, or create a new exposure pathway, is prohibited Some examples of activities that are prohibited include drilling, digging, placement of any objects or use of any equipment which deforms or stresses the surface beyond its load bearing capability, piercing the surface with a rod, spike or similar item, bulldozing or earthwork

Section 2 Any activity on the Property that may interfere with the integrity of the Remedial Action and continued protection of human health and the environment is prohibited

Section 3 Any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Remedial Action, or create a new exposure pathway, is prohibited without prior written approval from Ecology

Section 4 The Owner of the property must give thirty (30) day advance written notice to Ecology of the Owner's intent to convey any interest in the Property No conveyance of title, easement, lease, or other interest in the Property shall be consummated by the Owner without adequate and complete provision for continued monitoring, operation, and maintenance of the Remedial Action

Section 5 The Owner must restrict leases to uses and activities consistent with the Restrictive Covenant

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and notify all lessees of the restrictions on the use of the Property

Section 6 The Owner must notify and obtain approval from Ecology prior to any use of the Property that is inconsistent with the terms of this Restrictive Covenant Ecology may approve any inconsistent use only after public notice and comment

Section 7 The Owner shall allow authorized representatives of Ecology the right to enter the Property at reasonable times for the purpose of evaluating the Remedial Action, to take samples, to inspect remedial actions conducted at the property, and to inspect records that are related to the Remedial Action

Section 8 The Owner of the Property reserves the right under WAC 173-340-440 to record an instrument that provides that this Restrictive Covenant shall no longer limit use of the Property or be of any further force or effect However, such an instrument may be recorded only if Ecology, after public notice and opportunity for comment, concurs

Cynthia Stewart 10/25/01

Cynthia Stewart [DATE SIGNED]
Airport Manager
King County International Airport

NOTE The Property Owner must have this restrictive Covenant notarized]

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STATE OF WASHINGTON
COUNTY of KING

I the undersigned certify that I personally witnessed the execution of a Restrictive Covenant regarding the Legal Description American Avionics Lease at King County International Airport Document executed by Cynthia J Stewart in her position as Airport Manager

AJ MERRICK
Notary Public, State of Washington
My Commission expires May 16, 2003

Signed this 25th day of October in the year 2001

A J MERRICK NOTARY PUBLIC COMMISSION EXPIRES MAY 16, 2003 STATE OF WASHINGTON

6.5 Photo log

Photo 1: Current business on the property - from the east

Photo 2: North side of building

Photo 3: Southeast corner of the American Avionics building

Photo 4: South Side of the building